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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/584,734

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EXAMINER

PRITCHETT, JOSHUA L

ART UNIT

PAPER NUMBER

2872

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/584,734	Applicant(s) ARAI, SUSUMU	
	Examiner JOSHUA L. PRITCHETT	Art Unit 2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,6,8 and 10-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,6,8 and 10-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

This action is in response to Amendment filed January 21, 2009. Applicant amended claims 1, 2 and 6, cancelled claims 3-5, 7 and 9 and added claims 10-22.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1, 2 rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi (JP 2003-186427) in view of Kato (JP 10-039175) and Ohtomo (US 2003/0123153).

Regarding claims 1, 10, 11, 15, 16 and 20-22, Takahashi teaches a light diffusing element with a diffuse reflection surface provided on the inner surface of a structure essentially adjacent the base end and output end (abstract) wherein a light irradiation area defined by irradiating a first light of the light emitted from the illuminator which directly goes to the lens and passes substantially along an optical axis of the lens is irradiated with a second light of the light emitted from the illuminator which is scattered and reflected on the diffuse reflection surface and passes through the lens to control an illuminance distribution of the light irradiation area (Fig. 1;

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abstract). Takahashi lacks reference to a cylindrical shape. Kato teaches a cylindrical structure holding an illuminator at a based end (Fig. 1). Takahashi teaches an optical plate (22) on the output end but lacks reference to a spherical lens. Ohtomo teaches the use of a spherical lens (27) on the output end of an illuminating element (Fig. 5; para. 0015). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the Takahashi invention include the cylindrical shape of Kato for the purpose of achieving evenly distributed light intensity. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the Takahashi invention include the spherical lens of Ohtomo for the purpose of controlling the distribution of light from the illuminator.

Regarding claims 2, 12 and 17, Takahashi teaches the illuminance distribution is so configured as to keep a predetermined illumination evenness level (para. 0012).

Regarding claims 8, 14 and 19, Takahashi teaches the illuminator is an LED (23; abstract).

Claims 6, 13 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi (JP 2003-186427) in view of Kato (JP 10-039175) and Ohtomo (US 2003/0123153) as applied to claims 1, 11 and 16 above further in view of JP 63-80402.

Takahashi in combination with Kato and Ohtomo teaches the invention as claimed but lacks reference to a reflection surface opposite the light exit direction. JP 63-80402 teaches a light reflection surface opposite the light exit direction (Fig. 3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the Takahashi in combination with Kato and Ohtomo reference include the reflective surface opposite the light

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exit direction as taught by JP 63-80402 for the purpose of maximizing the amount of light produced by the light source exiting the lighting element.

Response to Arguments

Applicant's arguments, see Amendment, filed January 21, 2009, with respect to the rejection(s) of claim(s) 1 under Takahashi have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Kato ad Ohtomo. Applicant amended the claim language to include previously unsearched limitations. The Ohtomo reference was added to teach the newly claimed limitations.

Applicant's arguments, see Amendment, filed January 21, 2009, with respect to Obara have been fully considered and are persuasive. The rejection of claim 1 over Obara has been withdrawn.

Applicant's arguments filed January 21, 2009 have been fully considered but they are not persuasive.

Applicant argues the patentability of the improvements of the present invention should be taken in view of the crowded nature of the field. Applicant must provide evidence of secondary considerations for the examiner to consider for secondary considerations to overcome a prior art rejection.

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Applicant argues there is no through hole nor cylindrical portion with a diffusion part in the Takahashi reference. The Kato reference teaches the cylindrical portion as stated above. The opening between the light source of Takahashi and the end plate of Takahashi may be considered a through hole within the broadest reasonable interpretation of the claim language.

Applicant argues Takahashi irradiates a display near the light source and cannot irradiate a distant light irradiation area with high illumination evenness. There are no limitations in the claim language regarding the illumination distance. Further functional limitations of an apparatus claim cannot be used to overcome prior art, the differences must be structural (MPEP 2114).

Applicant argues Takahashi fails to perform the same function as the current invention. Evidence of secondary considerations must be provided before the examiner can determine whether the secondary considerations are sufficient to overcome the prior art of record. Further functional limitations of an apparatus claim cannot be used to overcome prior art, the differences must be structural (MPEP 2114).

Applicant argues the present invention specifies a size and shape not taught by the prior art. The claim language includes no limitations regarding the size of any component of the invention. The only shape limitations are the cylindrical structure and that limitation is taught by Kato as stated above.

Applicant argues the prior art of Takahashi and Kato cannot be properly combined. Applicant failed to provide reasoning to support this assertion therefore the examiner finds the assertion not persuasive.

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In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSHUA L. PRITCHETT whose telephone number is (571)272-2318. The examiner can normally be reached on Monday - Friday 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on 571-272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joshua L Pritchett/
Primary Examiner
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